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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
06/719,507	04/03/85	REIFFIN M	

MARTIN G. REIFFIN
9262 ROYAL PALM BLVD.,
GARDEN GROVE, CA 92641

EXAMINER	
LEE, T	
ART UNIT	**PAPER NUMBER**
232	8

DATE MAILED: 09/04/86

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 12/9, 12/12/85 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☒ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice re Patent Drawing, PTO-948.
3. ☐ Notice of Art Cited by Applicant, PTO-1449
4. ☐ Notice of informal Patent Application, Form PTO-152
5. ☐ Information on How to Effect Drawing Changes, PTO-1474
6. ☐ _____

Part II SUMMARY OF ACTION

1. ☒ Claims 26-50 are pending in the application.

   Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☒ Claims 26-50 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.

8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. These drawings are ☐ acceptable; ☐ not acceptable (see explanation).

10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____. has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed _____, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.

12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

9. Claims 26-50 are rejected under 35 U.S.C. 103 as being unpatentable over Lawrence et al, in view of Ferrio et al.

Lawrence discloses the invention substantially the same as claimed, comprising a central processing unit (microprocessor 26), a keyboard with a plurality of keys (KBI), input means for entering code into the system in response to activation of the keyboard (K/B adaptor 30), a memory for storing the entered code (text stream buffer 36), a compiler (interpreter/formatter), and an editor (text code stored in the memory section 38). In the formatting operation, the interpreter/ formatter normally has the control of the system. Upon the activation of a keystroke, the interpreter is interrupted and the control of the system is passed to the editor. After the editor has completed the entry of a code, the system control is returned to the

interpreter/formatter. See Fig. 5, col. 11 lines 1-56, col. 12 line 50-53, col. 14 lines 13-17 and lines 26-30.

10. The interpreter/formatter is functionally equivalent to the claimed compiler. It is noted that the interpreter/formatter performs its function one row at a time, see col. 11. lines 51-54. In the preferred embodiment disclosed by Lawrence, the original information come form the host processor and stores in the local system's memory. Interpreting/Formatting operation is subsequently started locally whereby the stored information can be modified locally. It would have been obvious to one of ordinary skill in the art that the information to be interpreted/formatted can be entered locally into the system. Under this circumstance, the interpreter/formatter normally has the control of the system. The interpreter/formatter will be initialized and waiting in a loop for the entry of codes (the information) from the keyboard. Since the entry of code is controlled by the editor, obviously, control of the system will be transferred from the interpreter/formatter to the editor whereby the control of the system will be subsequently returned to the interpreter/formatter after the entry of the code.

11. As pointed out hereinabove, the interpreter/formatter performs its function one row at a time, therefore, the interpreter/formatter will not perform its function until a row of information has been entered. These functions are functionally, equivalent to the identifying of the pause location and the

advancing of the pause location of the claimed invention. As more information entered into the system, the interpreter/formatter will perform its function when it is not being interrupted. When it is being interrupted, it transfer the control of the system to the editor for the entry of the code thereby giving "(t)he editing processor a higher priority than the formatting process', col. 12 lines 50-51. Specifically, the interpreter/formatter performs its function one row at a time. When the interpreter/formatter is processing one of the row, it can be interrupted by the keyboard input and transfers the control of the system to the editor which controls the input of data from the keyboard. The editor subsequently transfers the control of the system back to the interpreter/formatter after the keyboard input thereby enabling the interpreter/ formatter to continue its processing started from where it was interpreted. On the other hand, it would have been obvious to one of the ordinary skill in the art that when the interpreted/formatted information has been modified, the information has to be reinterpreted/ reformatted by the interpreter/formatter.

12. Lawrence does not explicitly teach the usage of an input buffer in temporary storing the keyboard input data before it is stored into the memory. On the other hand, Ferrio clearly and explicitly teaches the usage of an input buffer 222 in temporary storing keyboard input data before it is stored into the memory 220 (col. 7 line 58- col. 8 line 4). It would have been

obvious to one of ordinary skill in the art to incorporate the teachings of Ferrio into Lawrence system because, as the claimed invention, the cited references all teach an information processing system which processes information entered through the keyboard one row at a time.

13. Applicant's arguments with respect to claims 25-50 have been considered but are deemed to be moot in view of the new grounds of rejection.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cykowski teaches the usage of input buffer in temporary storing data input from the keyboard.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Lee whose telephone number is (703) 557-4999.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 557-2878.

TL/MS

8/14/86

JAMES D. THOMAS
SUPERVISORY PRIMARY EXAMINER
ART UNIT 232